DEPARTMENT OF ENERGY, NEVADA OPERATIONS RESEARCH, DEVELOPMENT AND DEMONSTRATION PERMIT FOR THE TACTICAL DEVELOPMENT AND DEMONSTRATION PROJECT

TACTICAL DEVELOPMENT AND DEMONSTRATION PROJECT FOR DEMILITARIZATION ACTIVITIES

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION BUREAU OF FEDERAL FACILITIES

DATE REVISED: February 22, 2000

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FOREWORD

Permittee: United States Department of Energy, Nevada Operations Office

Facility: Nevada Test Site
EPA Id Number: NV3890090001
Permit Number: RD&D #1

The Nevada Division of Environmental Protection (NDEP) issues this Research Development and Demonstration Permit (hereinafter referred to as "Permit") under the authority of Nevada Revised Statutes (NRS) 459.520 and Nevada Administrative Code (NAC) 444.842 through 444.960. Additional requirements determined to be protective of Human Health and the Environment are ordered pursuant to 40 CFR §270.65(a)(3). The Permittee is authorized to operate a hazardous waste research, development and demonstration project at the above location. This Permit is issued to the United States Department of Energy Nevada Operations Office (DOE/NV), (hereinafter called the Permittee) to conduct a Research Development and Demonstration project as defined by 40 CFR §270.65. The Permittee is subject to the conditions identified in this Permit and other applicable state and federal regulations. The project will take place at the TaDD Facility in Area Eleven (11) at the Nevada Test Site (hereinafter referred to as the Facility), approximately 105 km (65 mi) northwest of Las Vegas, Nevada.

The Nevada Test Site (NTS) is a United States Department of Energy (DOE) installation occupying approximately 3,496 km² (1,350 mi²) of federally owned land in southeastern Nevada's Nye County. The NTS has served primarily as an underground nuclear weapons testing site. This Permit consists of the conditions contained herein and the applicable regulations contained in 40 CFR Parts §\$260 through 270 and 40 CFR Part 124, as specified in the Permit. Applicable regulations are those that are in effect on the date of issuance of the Permit, in accordance with 40 CFR §270.32(c). This is the first issuance of this Permit. A maximum of two (2) renewals may be applied for by the Permittee pursuant to 40 CFR §270.65. All conditions contained in this Permit identifying time constraints will be abided by the Permittee. Any deviation from the conditions of this Permit may automatically revoke this Permit until reissued. In addition, the Permittee will conduct the research consistent with the prudent operation of a research facility, in addition to the conditions specified in this Permit. Knowingly providing false, inaccurate or misstated information submitted in support of this activity can and will be used as grounds for the modification and/or termination of this Permit and enforcement action by the NDEP.

The Permittee is hereby required to inform the Administrator of the NDEP of any deviation from or changes in the information submitted in support or any condition which may affect the Permittee's ability to comply with all applicable state and/or federal regulations or the conditions of this Permit.

This Permit is based on the assumption that the information submitted in the TaDD Complex Permit Application and Attachments adopted by reference are accurate and that the facility is constructed and operated as specified. Any inaccuracies found in the submitted information may be grounds for the termination, revocation and reissuance, or modification of this Permit in accordance with 40 CFR §§ 270.41, 270.42, 270.43 and 270.65 and for enforcement action.

This Permit is effective as of <u>January 1</u>, <u>2000</u> and shall remain in effect for one year thereafter unless revoked and/or reissued under 40 CFR §270.65, or extended under the conditions of Permit Section 4.2. The Permittee may request NDEP approval to establish an earlier effective date through written notification forty five (45) days prior to the requested effective date. Upon approval, the new effective date will be incorporated into this permit.

This Permit shall be reviewed by the Administrator one year after the date of Permit issuance or reissuance and shall be modified as necessary, as provided in NRS 459.520(4) and 40 CFR §270.65 unless terminated or revoked for cause.

Administrator

Date

LIST OF ACRONYMS

CCRFCD Clark County Regional Flood Control District

CFR Code of Federal Regulations
COE U.S. Army Corps of Engineers
DDESB DoD Explosive Safety Board
U.S. Defense Nuclear Agency

DoD Department of Defense
DOE U.S. Department of Energy

DOE/NV U.S. Department of Energy Nevada Operations Office

DOT U.S. Department of Transportation EOD Explosive Ordnance Disposal

EPA U.S. Environmental Protection Agency FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

HSWA Hazardous and Solid Waste Amendments
HWAS Hazardous Waste Accumulation Site
HWSU Hazardous Waste Storage Unit

LEL Lower Explosive Limit
NAC Nevada Administrative Code

NDEP Nevada Division of Environmental Protection

NEPA National Environmental Policy Act

NOAA National Oceanic and Atmospheric Administration

NRS Nevada Revised Statutes

NTS Nevada Test Site

NV Nevada Operations Office (DOE)
PHA Preliminary Hazards Analysis

RCRA Resource Conservation and Recovery Act

RD&D Research, Development, and Demonstration (Permit)

ROD Record of Decision

RWMS Radioactive Waste Management Site

SAA Satellite Accumulation Area

TBD To Be Determined

TaDD Tactical Demilitarization Development Project

Introduction

The Department of Energy, Nevada Operations has proposed to conduct a Research Demonstration and Development (RD&D) Project. Testing will be done in Area Eleven (11) of the Nevada Test Site under a RCRA RD&D Permit [identified as the Tactical Demilitarization Development Project or TaDD Project].

Operation at the facility will consist of storage of Military Munitions (Shillelagh Rockets) in accordance with Department of Defense Explosives Safety Board (DDESB) Standards. Ignition of the rocket propellent, collection of emissions data for the design of a treatment unit and retrieval of usable portions of the rocket "carcass" for beneficial use. All tests will be conducted statically with collection of emission gases by the gas holder and the off-gas treatment system. The operation of the facility will be constrained by the conditions of this Permit and/or any condition the NDEP considers a real or perceived "threat to human health and/or the environment" as determined by the NDEP.

Project Description

In the 1995 Department of Defense (DoD) Funding Authorization Act, the Department of Energy (DOE) was authorized to develop alternative methods for the demilitarization of DoD munitions at the Nevada Test Site (NTS). Preliminary demilitarization activities were initiated in 1995 and have continued to date. These activities included simple training exercises associated with the munitions demilitarization process and other more sophisticated data gathering efforts. To support the data gathering efforts, the DOE and DoD propose to construct and operate a Tactical Demilitarization Development (TaDD) Complex located in Area 11 at the NTS. Activities planned for this complex include the development, construction, and testing of a "Prototype Unit" for the demilitarization of small tactical missiles. To test this unit, a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Research, Development, and Demonstration (RD&D) Permit, as codified under 40 Code of Federal Regulations (CFR) §270.65, is required.

In accordance with 40 CFR §124.31, the DOE/NV held a pre-application meeting in order to solicit questions from the community and inform the community of the proposed construction and operation of the TaDD Complex. Exhibit A-1 of the TaDD Complex Permit Application provides the details of the meeting and the required public notices.

Recently, DOE and DoD initiated the development of a more efficient and environmentally friendly treatment unit for the removal of propellant from surplus small tactical missiles, facilitating resource recovery options. Currently, this type of missile is being treated in an open burn/open detonation process at DoD sites.

The objective of the Prototype Unit is to validate a treatment method to remove the propellants from the Shillelagh small tactical missile in an environmentally sound manner. Upon effective treatment of the propellants, many of the components of the missile may be recycled, allowing most of the missile resources to be recovered. To test the operation of the Prototype Unit and to demonstrate optimal performance, actual waste military munitions must be used as feedstock material. A RCRA RD&D Permit must be obtained prior to operating the unit.

The initial demilitarization tests were performed at the Naval Air Warfare Center (NAWC) at China Lake, California, to gain the necessary data to assist in the preliminary engineering design for the Prototype

Unit. Additional research and development will occur at the TaDD Complex in Area 11 of the NTS, based on data obtained from the testing of the Prototype Unit.

The Prototype Unit consists principally of a missile holder, gas conversion chamber, gas holder, exhaust gas filtration, and a missile off-gas treatment system. The testing will demonstrate that the treatment method can achieve an environmentally sound alternative to open burning and to validate the process rate.

Upon completion of the testing and validation of the Prototype Unit, additional transportable units may be fabricated and delivered to various munition stockpiles within the United States. These units are subject to the applicable federal, state, and local environmental Permit requirements.

TaDD Complex Description

The TaDD Complex is located within the NTS in Area 11 and occupies approximately 0.9 hectares (ha) (2.2 acres). The scope of this Permit is limited to the TaDD Complex as utilized for the treatment of Shillelagh missiles. Ancillary equipment and structures that are critical to the operation of the Prototype Unit are also considered to be part of the "regulated unit." The regulated unit consists of all portions of the TaDD Facility used to either store, treat or manage hazardous waste at the Facility. The maximum amount of hazardous waste to be received and treated under this Permit shall not exceed two-hundred (200) missiles.

- SECTION 1 - Standard Conditions

1 Effect Of Permit

This Permit is issued by the Nevada Division of Environmental Protection (NDEP) under the authority of Section §3006 RCRA (40 CFR Regulations codified in Part 270), NRS 459.520 and NAC 444.842 through 444.8746, 444.940 through 444.9555 and 444.960. This Permit is issued to the Department of Energy, Nevada Operations (DOE/NV) (hereinafter referred to as the "Permittee") to operate a RCRA Research, Development and Demonstration Facility (hereinafter referred to as the "TaDD Facility," "TaDD Complex" or "Facility"). This Permit authorizes only the research of hazardous waste treatment and storage expressly described in this Permit and does not authorize any other treatment or management of hazardous waste. The NDEP will consider compliance with the terms of this Permit to be compliance with the requirements of RCRA Subtitle C, State and Federal regulations concerning the management of hazardous waste listed or otherwise described in this Permit. Unless specifically identified, the DOE/NV is assumed to be in compliance with all applicable regulations, whether state or federal.

Issuance of this Permit by the NDEP does not prevent the NDEP from adopting or amending regulations, issuing administrative orders, or obtaining judicial orders which impose requirements which are in addition to or more stringent than those in existence at the time this Permit is issued. Nor does it prevent the enforcement of these requirements against the Permittee of the facility. The Permittee shall comply with any such additional or more stringent requirements in addition to the requirements and conditions specified in this Permit. Also, issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons, property or the environment, any invasion of anothers' private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this Permit does not constitute a defense to any action brought under Section 7003 of RCRA (42 U.S.C. §6973), Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9606(a) commonly known as CERCLA), or any other law governing protection of public health or the environment inclusive of state law. The Permittee acknowledges and has been made aware of all conditions contained in this Permit in addition to the requirements specified in the 40 CFRs. By accepting this Permit, the Permittee accepts the conditions contained herein and the NDEPs authority to exercise said authority contained in the applicable sections of the 40 CFRs, NACs and NRSs. The authority of enforcement for the purpose of compliance with this Permit is limited to the boundaries of the Facility as defined by Figure B-1 of the TaDD Complex Permit Application "Site Plan" [drawing # JS-3203-011-C1]. This Permit does not infringe, restrict or compromise the authority of Permit NEV #HW009 issued to the DOE/NV March 1995. Neither does it add to the authority of Permit NEV #HW009 for purpose of

enforcement or compliance, nor may it be used to assess additional penalties or violations against the Permittee in the event of non-compliance with that Permit.

1.1 Permit Actions

- 1.1.1 <u>Modification, Revocation, and Termination</u> This Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§270.41, 270.42, 270.43, and 270.65. The filing of a request for a Permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any Permit condition, or enforcement under state or federal regulations.
- 1.1.2 <u>Administrative Condition(s)</u> The operating conditions specified in Section Four (4) of this Permit may be modified by the Administrator without triggering a major (Class 2 or 3 as defined by 40 CFR §270.42 Appendix I) Permit modification if data from the operating record indicate such modification(s) is necessary. If a description is not contained within Appendix I then the modification will be at the NDEPs discretion/interpretation.

1.1.2.1 Planned Changes

Should the Permittee desire to make any changes in the operation of the facility governed by this Permit, the administrator shall be notified fourteen (14) calender days prior to the intended change. The notification must be done in accord with Section 1.7. Examples of changes include alteration of the treatment technology, the Prototype Unit, use of a different pollution control device, change in waste storage and/or any change in the activity that is not authorized in this Permit, or installation/removal of any additional equipment related to the treatment or storage of hazardous waste. Any impact on the conditions of this Permit falling under Section E.1.d of the Application will be evaluated and presented to the NDEP. In the case of a disagreement between the NDEP and the DOE/NV, operation at the TaDD will cease until resolved.

1.1.3 Protection of Human Health and the Environment The Administrator shall order an immediate termination of all operations under this Permit at any time it is determined, by the NDEP, termination is or may be necessary to protect human health and/or the environment or the Facility appears to be operated in conflict with the intent of this Permit. This termination of activities may be made either orally or written but shall be made by either the Administrator or his designee [40 CFR §270.65(c).].

In the event of an oral termination, written correspondence addressing the cessation of operations shall follow within fourteen (14) days of the oral order.

1.2 Severability

The provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

1.3 Permit Expiration

This Permit shall remain in effect for one (1) calender year following the effective date of this Permit, unless:

- 1. revoked and reissued or,
- 2. terminated or,
- 3. revoked under one of the conditions contained herein or,
- 4. extended as identified in Section 4.2.1 or,
- 5. renewed in accordance with 40 CFR §270.65(d).

1.4 Research Development and Demonstration Permit Application

1.4.1 The TaDD Complex Permit Application dated July 1998 and certified July 21, 1998 and July 23, 1998, associated documentation, subsequent revisions of associated documentation, and associated tasks, as referenced by the Permit Application, is hereby approved, adopted by reference, and made part of this Permit. Non-compliance with any one of the requirements, conditions or tasks described or referenced in the Permit Application may be cause for the revocation and reissuance or termination of any part or whole of this Permit.

1.4.1.1 Documents

- C TaDD Complex Test Operation Procedure ~ LID # L-3203-004
- C TaDD Complex Test Plan Outline ~ Doc. # 3203-011-TP-001
- C TaDD Complex Waste Analysis Plan (WAP) ~ Section C
- C TaDD Complex Personnel Training Requirements ~ Section H
- C TaDD Complex "Contingency Plan and Emergency Procedures for the Tactical Demilitarization Development Project Facility Area 11, Nevada Test Site"

- C TaDD Facility Closure Plan ~ Section L
- C TaDD Waste Management Procedure ~ LID # L-3203-003
- C TaDD Project Missile Storage, Handling and Disassembly SOP \sim Shillelagh LID # L-3203-001
- C TaDD Complex Hazards Assessment LID # L-3203-006
- C RCRA RD&D Permit Application for the TaDD Complex, July 1998
- C Department of Defense Explosive Safety Board (DDESB) standards for the storage of Munitions, either as waste or as a portion of the national arsenal
- 1.4.2 In the event of any conflict between this Permit, the RD&D Permit Application referenced herein, and any applicable regulation, the most stringent provision, as interpreted by the NDEP shall be controlling.
- 1.4.3 The RD&D Permit Application, correspondence and this Permit shall be maintained at the facility at all times until closure is completed and approved by the NDEP.

1.5 Research Plan

The Permittee shall follow the procedures described in the TaDD Complex Test Operation Procedure \sim LID # L-3203-004

1.6 Definitions

For the purpose of this Permit, terms used herein shall have the same meaning as those in Title 40 of the Code of Federal Regulations (40 CFR Parts 260 through 264 and 270), unless this Permit specifically states otherwise; where terms are not defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "Administrator" is the Administrator of the Nevada Division of Environmental Protection (NDEP) for the state of Nevada.

1.7 Reports, Notifications and Submissions To The Administrator

All reports, notifications or other submissions required by this Permit will be sent by certified mail to:

Chief, Bureau of Federal Facilities

Nevada Division of Environmental Protection

333 West Nye Lane. Rm 138

Carson City, Nevada 89706-0851

1.8 Signatory Requirements

All reports or other information submitted to the Administrator under the terms of this Permit shall be signed and certified as required by 40 CFR §270.11

1.9 Documents To Be Maintained At The Facility

The Permittee shall maintain the following amendments, revisions, and modifications of project documents at the TaDD Facility, until closure is completed and certified by an independent registered professional engineer, or equivalent, and approved by the NDEP:

- 1. Test Operations Plan, as required by this Permit
- 2. Waste Analysis Plan (WAP), as required by 40 CFR §264.13 and this Permit.
- 3. Personnel training documents and records, as required by 40 CFR §264.1(d) and (e) and this Permit.
- 4. Contingency and Emergency Response Plan, as required by 40 CFR §264.50
- 5. Closure Plan, as required by 40 CFR §264.112(a) and §264.1202.
- 6. Operating Record, as specified by 40 CFR §264.73
- 7. Inspection schedules and logs as required by 40 CFR §264.15(b) and (d) and this Permit.
- 8. Documents required by Section 1.4.1.1 of this Permit.
- 9. Calibration Schedules and Certification for Continuous or Batch Monitoring Equipment
- 10. Continuous or Batch Emission Monitoring Data as required by this Permit
- 11. TaDD Complex Site Specific Health and Safety Program document(s) referenced in Section F of the TaDD Complex Permit Application

1.10 Duties And Requirements

1.10.1 <u>Duty to Comply</u> The Permittee shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit. Any other Permit noncompliance constitutes a violation of RCRA, the NRSs and NACs and is grounds for enforcement action, Permit termination, revocation and reissuance, modification, or denial of Permit renewal.

1.10.2 <u>Duty to Apply for Permit Renewal</u> If the Permittee wishes to continue the activities allowed by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application and/or request to renew this Permit no less than Ninety (90) days prior to expiration of this Permit in accordance with 40 CFR §270.65(d).

- 1.10.3 Need to Halt or Reduce Activity Not a Defense It shall not be a defense for the Permittee in an enforcement action to argue that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.
- 1.10.4 <u>Duty to Mitigate</u> In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.
- 1.10.5 Proper Operation and Maintenance The Permittee shall at all times properly operate and maintain all activities and systems of treatment, storage and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit and applicable regulations. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. In addition, the Permittee shall comply with all requirements either specified or adopted by reference in subsequent correspondence between the Permittee and the Administrator. This provision requires the operation of back-up or auxiliary systems or similar systems only when necessary to comply with the conditions of the Permit.
- 1.10.6 Permit Actions This Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§270.41, 270.42, 270.43, and 270.65(c). The filing of a request for a Permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any Permit condition.
- 1.10.7 <u>Property Rights</u> This Permit does not convey any property rights of any sort, or any exclusive privilege.
- 1.10.8 <u>Requirement to Provide Information</u> The Permittee shall furnish to the Administrator, within twenty one (21) calender days, any relevant information which the Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to

determine compliance with this Permit. The Permittee shall also furnish to the Administrator, upon request, copies of records required to be kept by this Permit.

- 1.10.9 <u>Inspection and Entry</u> The Permittee shall allow the Administrator, or an authorized representative, upon the presentation of credentials and/or other documents as may be required by law or requirements of the Permittee (that are not in direct conflict with the requirements of this part) to:
- 1.10.9.1 Enter during normal operating hours or during operations, the Permittee's premises (*i.e.* the TaDD Facility) where this regulated activity is located or conducted, or where records must be kept under the conditions of this Permit;
- 1.10.9.2 Have access to and copy, at all times, any records that must be kept under the conditions of this Permit, state or federal requirements;
- 1.10.9.3 Inspect, during normal operating hours or during operations, any activities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- 1.10.9.4 Sample or monitor, at all times for the purposes of assuring Permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

The Permittee, by acceptance of this Permit has consented to the above as a condition of issuance.

1.10.10 Monitoring and Records

- 1.10.10.1 Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity in accordance with the Test Plan Outline [Doc. # 3203-011-TP-001]. Unless otherwise requested and approved by the NDEP, the Permittee must use sampling and test methods specified in EPA document SW-846 Third Edition, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, and/or 40 CFR §60 Appendix A, or in other EPA documents.
- 1.10.10.2 The Permittee shall retain the interim and final project report and records of all data used to complete the application and continued monitoring as required by and for this Permit for a period not less than 5 years from the date of issuance. These periods may be extended by

request of the Administrator at any time and are automatically extended during the course of any unresolved enforcement action, or request for public review or comment regarding this facility.

- 1.10.10.2.1 Records of monitoring information shall specify:
 - 1. The dates, exact place, and times of sampling or measurements;
 - 2. The individuals who performed the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The individuals who performed the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
 - 7. Additional record keeping identified either in this Permit or in correspondence between the Administrator and the Permittee
- 1.10.10.2.2 <u>Prospective Changes in Operation</u> If the Permittee wishes to make any changes in the operation of the RD&D unit, he must notify the Administrator no less than fourteen (14) calendar days before the date the Permittee intends to make the change. This notification must be by certified mail. Changes in the operation of the RD&D unit include, but are not limited to, alteration of the treatment technology, use of different pollution control devices, and any changes in the operation of the activity not authorized in this Permit.
- 1.10.10.2.2.1 Changes or modifications to the Facility not identified in this Permit. Notification to the NDEP is not required when replacing or upgrading existing equipment with comparable or more advanced equipment. However, if the Permittee wishes to make any changes in the operational activities identified in this Permit, the NDEP must be notified in writing, fourteen (14) calender days prior to the date of the intended change. This notification must be done by certified mail. Changes in the operation of the RD&D activities include, alteration of the treatment technology, use of different pollution control devices, use of alternative feed materials (i.e. other than Shillelagh Rockets), changes in waste storage and/or any change in the activity not expressly authorized in this Permit that may affect, as determined by the NDEP, human health and/or the environment.
- 1.10.10.2.3 <u>Anticipated Noncompliance</u> The Permittee shall give advanced notice of at least forty-eight (48) hours to the Administrator of any un-planned changes in the Permitted activity which may result in noncompliance with Permit requirements.

1.10.10.2.4 <u>Certification of Construction or Modification</u> The Permittee may not commence treatment of munitions (hazardous waste) at the facility until:

- 1.10.10.2.4.1 The Permittee, and an independent registered professional engineer (or equivalent) have notified the Administrator the activity is constructed in compliance with this Permit; followed by a letter signed by the Permittee in accordance with 40 CFR §270.11 and registered professional engineer (or equivalent) stating the activity has been constructed in compliance with the Permit; and
- 1.10.10.2.4.2 The Administrator has inspected the modified or newly constructed activity and finds it is in compliance with the conditions of the Permit; or
- 1.10.10.2.4.3 The Administrator has either waived the inspection or has not within seventy-two (72) hours notified the Permittee of his or her intent to inspect.
- 1.10.10.2.5 Twenty-Four Hour Reporting The Permittee shall report to the Administrator any noncompliance which may endanger human health or the environment. Information shall be provided orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:
- 1.10.10.2.5.1 Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
- 1.10.10.2.5.2 Any information of a release or discharge of hazardous waste, or of a fire or explosion from the hazardous waste research, development and demonstration activity, which could threaten the environment or human health inside or outside the Permitted facility. The description of the occurrence and its cause shall include:
 - 1. Name, address, and telephone number of the owner or operator;
 - 2. Name, address, and telephone number of the activity site;
 - 3. Date, time, and type of incident;
 - 4. Name and quantity of material(s) involved;
 - 5. The extent of injuries, if any;
 - 6. An assessment of actual or potential hazard to the environment and human health inside or outside the activity, where this is applicable; and

7. Estimated quantity and disposition of recovered material that resulted form the incident.

8. An assessment of the incident its cause and proposed solution

A written submission shall also be provided to the Administrator within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times). If the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- 1.10.10.2.6 Other Noncompliance The Permittee shall report all other instances of noncompliance not otherwise required to be reported above.
- 1.10.10.2.7 Other Information Whenever the Permittee becomes aware that he or she failed to submit any relevant facts in the TaDD Complex Permit application, or submitted incorrect information in the Permit application or in any report to the Administrator, the Permittee shall promptly submit such facts or information to the Administrator.
- 1.10.10.2.8 <u>Transfer of Permit</u> This Permit may not be transferred to a new owner and/or operator unless it is modified or revoked and reissued pursuant to 40 CFR §270.41(b)(2) or 270.42(d).
- 1.10.10.2.9 <u>Manifest Discrepancy Report</u> If a discrepancy in a manifest is discovered, the Permittee must attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the Permittee must submit a letter report, including a copy of the manifest, to the Administrator.

1.11 Confidential Information

Any information required to be submitted by this Permit may be claimed as confidential in accordance with 40 CFR §270.12 (Confidentiality of Information) and §2.203(b) (Public Information, Subpart B-Confidentiality of Business Information).

1.12 Documents To Be Submitted Prior To Operation

Refer to the "Compliance Schedule" in Section 2.15 of this Permit.

-SECTION 2-General Operating Conditions

2 Design And Operation Of Hazardous Waste RD&D Facility

The Permittee shall maintain and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment. (40 CFR §264.31)

2.1 Research Plan

The Permittee shall follow the procedures described in the attached Research, Development and Demonstration Protocol, Section E and Test Plan Outline in Attachment E-1 of the TaDD Complex Permit Application

2.2 General Inspection Requirements

The Permittee shall follow the inspection plan set out in the Inspection Schedule, Section F.4 of the TaDD Complex Permit Application. The Permittee shall remedy within fourteen (14) calender days any deterioration or malfunction discovered by an inspection as required by 40 CFR § 264.15(c). Records of inspections and repairs shall be kept as required by 40 CFR §264.15(d).

2.3 Personnel Qualifications

The Permittee shall ensure that personnel are qualified to manage hazardous waste as provided in Section H of the TaDD Complex Permit Application. All personnel involved with activities under this Permit shall receive this training prior to initiation of activities under this Permit as described in Section H. The Permittee shall maintain training documents and records as required by 40 CFR §264.16(d) and (e).

2.4 Preparedness And Prevention

1. <u>Required Equipment</u> At a minimum, the Permittee shall provide the Facility with the equipment set forth in the Contingency Plan and Emergency Procedures, Area 11 NTS.

2. <u>Testing and Maintenance of Equipment</u> The Permittee shall test and maintain the emergency equipment as necessary to assure its proper operation in time of emergency. All records of testing and maintenance shall be made a part of the operating record for the Site.

- 3. <u>Access to Communications or Alarm System</u> The Permittee shall maintain access to the communications or alarm system as required by 40 CFR §264.34.
- 4. Required Aisle Space At a minimum, the Permittee shall maintain aisle space as required by 40 CFR §264.35 and DDESB Standards.
- 5. <u>Arrangements With Local Authorities</u> The Permittee shall maintain arrangements with State and local authorities as required by 40 CFR §264.37. If State and local officials refuse to enter into or renew existing preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

2.5 Emergency Response Plan

- 1. <u>Implementation of Plan</u> The Permittee shall immediately carry out the provisions of the Contingency Plan, Section G of the TaDD Complex Permit Application, and follow the emergency procedures described by 40 CFR §264.56 and the Contingency plan whenever there is an imminent or actual fire, explosion, or release of hazardous waste or constituents which threatens or could threaten human health or the environment.
- 2. <u>Copies of Plan</u> The Permittee shall comply with the requirement of 40 CFR §264.53.
- 3. <u>Amendments to Plan</u> The Permittee shall review and immediately amend, if necessary, the emergency response plan, as required by 40 CFR §264.54.
- 4. <u>Emergency Coordinator</u> The Permittee shall comply with the requirements of 40 CFR §264. 55.

2.6 Closure

1. <u>Performance Standard</u> The Permittee shall close the Facility as required by 40 CFR §264.111 and §264.1201 and in accordance with the closure plan, refer to Section 2.15 Compliance Schedule.

2. <u>Amendment to Closure Plan</u> The Permittee shall amend the closure plan in accordance with 40 CFR §264.112(b) whenever necessary.

- 3. <u>Notification of Closure</u> The Permittee shall notify the Administrator by certified mail at least thirty (30) days prior to the date closure is expected to commence.
- 4. <u>Time Allowed for Closure</u> After treating the final volume of hazardous waste, the Permittee shall remove from site all hazardous waste and shall complete closure activities in accordance with the schedules specified in the closure plan.
- 5. <u>Disposal or Decontamination of Equipment</u> The Permittee shall decontaminate and/or dispose of all equipment used in the RD&D activity as required by 40 CFR §264.114 and the closure plan.
- 6. <u>Disposal of Hazardous Waste</u> All hazardous waste on-site at the commencement of closure shall be removed from the site by transporting it to a permitted or interim status treatment, storage, or disposal facility or rendered non-hazardous. The waste shall not be returned, unless Part 3.1 Condition of Munitions applies, to the source unless the source is permitted or has interim status to manage the waste.
- 7. <u>Certification of Closure</u> The Permittee shall certify that the activity has been closed in accordance with the specifications in the closure plan, Section I as required by 40 CFR §264.115.

2.7 Cost Estimate For Closure

This section does not apply to Federal Facilities.

2.8 Liability Requirements

The Department of Energy, Nevada Operations has, by acceptance of this Permit assumed the responsibility of closure and compliance with the applicable regulations governing the management of hazardous waste.

2.9 Incapacity Of Owner/Operators, Guarantors, Or Financial Institutions

This section does not apply to Federal Facilities.

2.10 Manifest System

The Permittee shall comply with the manifest requirements of 40 CFR §§264.71, 264.72, and 264.76.

2.11 Security

The Permittee shall comply with the security provisions of Section F-1 of the TaDD Complex Permit Application

2.12 General Requirements For Ignitable, Reactive, Or Incompatible Waste

The Permittee shall comply with the requirements of 40 CFR §264.17(a).

2.13 Required Notices

- 1. <u>Imports</u> The Permittee shall notify the Administrator in writing at least sixty (60) days in advance of the date the Permittee expects to receive the Munitions identified in this Permit.
- 2. <u>Notice to Generators</u> In this case the Permittee is also the generator. The Permittee will maintain records for the Department of Defense (DoD) as proxy for making the waste determination. The Permittee must keep a copy of all records as part of the operating record.

2.14 General Waste Analysis

The Permittee shall follow the procedures described in the Waste Analysis Plan Section C

2.15 Compliance Schedule

2.15.1 The Permittee is forbidden from treating waste identified in this Permit until the NDEP has had an opportunity to review and confirm the documentation, items one (1) through twelve (12), as identified below is finalized. In addition, prior to operation of the Prototype Unit the Permittee must also comply with Section 1.10.10.2.4 Certification of Construction or Modification. After review, the NDEP will provide a letter to the DOE/NV concurring the documentation necessary for operation of the facility and treatment of waste is in place or further review is necessary. The Permittee is

restricted from treatment until receipt of said letter.

2.15.2 Failure to comply with any document or task associated with this section automatically revokes this Permit until such time as the Administrator has renewed or reissued it (40 CFR §270.65)

Compliance Schedule			
	Item/Task	Date	
1	Department of Defense Authorization for the Department of Energy to make a Waste Declaration	Fourteen (14) days prior to receipt of munitions	
2	Final Site Specific Contingency Plan	Fourteen (14) days prior to receipt of munitions	
3	Updated Designation of Project Coordinator, Lead Munitions Handler, Project Safety Coordinator and Alternate(s)	Fourteen (14) days prior to receipt of munitions	
4	Final Detailed Engineering drawings, stamped by a PE (or equivalent), for the TaDD Complex, Test Pad, and Prototype Unit	Thirty (30) days prior to execution of Primary Phase of Operation	
5	Specifications used for construction for the Prototype Unit	Seven (7) days after the effective date of this Permit	
6	Final TaDD Complex Waste Analysis Plan	Fourteen (14) days prior to receipt of munitions	
7	Final Test Operations/Research Plan Outline	Fourteen (14) days prior to receipt of munitions	
8	Final Missile Storage, Handling and Disassembly - Shillelagh LID (L-3203-001)	Fourteen (14) days prior to receipt of munitions	
9	Final Waste Management LID (L-3203-003)	Fourteen (14) days prior to receipt of munitions	
10	Final Site Specific Health and Safety Program documents referenced in Section F of the Permit Application	Fourteen (14) days prior to execution of Primary Phase of Operation	
11	Draft Outline of the Interim Status Report required by Section 2.15 Compliance Schedule of this Permit, for comment by the NDEP	Fourteen (14) days prior to receipt of munitions	
12	Detailed schedule of Primary Activities	Thirty (30) days prior to execution of Primary Phase of Operation	
13	Detailed schedule of Secondary Activities	Submitted with Interim Status Report	
14	Final Closure Plan in accord with Section 2.6 Closure	Thirty (30) days after submission of the Interim Status Report	
15	Cessation of Operations [As specified in Section 4.2]	Upon completion of testing/treating Fiftieth (50 th/s) Missile	
16	Interim Status Report and Certification by DOE/NV	Forty-Five (45) days after Primary Activity Completion	
17	Submission of Final Report	Ninety (90) days after testing of the Two-Hundredth (200 th) Munition or Thirty (30) days prior to the end of operations whichever is later.	

Note: Final document is the signed procedure in effect at the time that associated tasks or activities are occurring.

-SECTION 3-Conditions For Storage and Management

3 Waste Identification

The Permittee is authorized to store (Shilleglegh Missiles), and accumulate (treatment residue) only the following wastes, subject to the terms of this Permit. Any waste not identified constitutes a violation of the Permit and automatically revokes this Permit until reissued by the administrator. The Missile Storage, Handling and Disassembly - Shillelagh LID (L-3203-001) and Waste Management LID (L-3203-003) are adopted by reference for compliance with this section. In addition the Permittee shall comply with the requirements of 40 CFR §264.1201(a),(b)(2)&(3),(c),(d),(e),(f).

Acceptable Wastes to be Managed at the TaDD Facility			
EPA Hazardous Waste Code	Description		
D003	The Shilleglegh Missile (Rocket Motor)		
Code for the Carcass (TBD)	Rocket Motor Carcass		
Code for the Circuit Boards (TBD)	Command and Guidance System [Circuit Boards]		
D003 & D008 (TBD)	Propellent Cartridges		
D003	Gas Generator Cartridge		
D002 & D007	Thermal Battery(s)		
Code for the Emission Filters (TBD)	Emission Filters		
Code for the Dust Collector (TBD)	Dust Collector		
Code for the Secondary Filter (TBD)	Secondary Filter		
Code for Chemical Absorption Traps (CATs) (TBD)	CATs		
Characterization Code of the Prototype Unit, associated piping and appurtenances after testing (TBD)	Prototype Unit		

3.1 Condition Of Munitions

Should the Permittee determine a Shilleglegh Missile has been received in "unacceptable condition" (e.g., severe rusting, apparent structural defects etc.) or if it begins to leak, the Permittee shall either implement the Contingency Plan and Emergency Procedures as described in Section 3.1.1 or remove the munition from the TaDD Complex as described in Section 3.1.2. In either case, the munition must be removed from the Facility within twenty-one (21) calendar days from when the defect is detected. At no time shall the Facility store or accept any munition unacceptable for testing under this Permit beyond this time frame. For the purposes of compliance, this time frame applies from the point of discovery forward.

- 3.1.1 Should the Permittee determine the missile is unsuitable for testing and presents a threat, the Permittee shall dispose of the Missile as identified in "The Contingency Plan and Emergency Procedures for Tactical Demilitarization (L-3203-002)"
- 3.1.2 The Permittee shall remove the munition from the facility within twenty-one (21) calendar days. This may include returning the munition to the point of origin or disposition it as a waste munition.

3.2 Compatibility Of Wastes With Containers

The Permittee shall assure that the ability of the container to contain the waste is not impaired, as required by 40 CFR §264.172.

3.3 Management Of Waste Munitions

The Permittee shall manage waste munitions as specified in 40 CFR §266 Subpart M - Military Munitions and the Standard Operating Procedure as required by this Permit.

3.4 Containment & Storage

The Permittee shall construct and/or maintain the containment system as required by the Department of Defense Explosive Safety Board (DDESB) Standards and the TaDD Complex Permit Application. The containers shall be managed to assure they are protected from contact with accumulated liquids resulting from leaks, spills, or precipitation.

3.4.1 Bunker 101 ~ Shillelagh Missile Storage

This Bunker will be used only for the storage of munitions prior to the waste declaration pursuant to 40 CFR §266.202(b)(2). Munitions shall be stored per DDESB standards. Storage not in compliance with these standards, as determined by the NDEP, will constitute noncompliance and revoke this Permit until reissued by the Administrator.

3.4.2 Building 102 ~ Shillelagh Missile Disassembly Building

This building will be used for disassembly and preparation of missiles for treatment, and limited portions of this building will be used for analytical and diagnostic purposes. The Permittee shall not conduct any other operations in this building while missiles are present in the building and being prepared for treatment.

3.4.3 Bunkers 104 and 105 ~ Waste Shillelagh Missile Storage

Bunkers 104 and 105 are to be used for storage of the prepared waste missile prior to treatment. The missiles will be stored under 40 CFR §264.1201 (Subpart EE) and the DDESB standards identified above. Storage shall not be longer, for any missile or group of missiles, than ninety (90) days prior to treatment. Storage in exceedence of this will constitute a violation of 40 CFR §262.34 and automatically revoke this Permit until reissued.

3.4.4 Hazardous Waste [treated Shillelagh Missile] Accumulation Area

For the purposes of this Permit, pursuant to 40 CFR §270.65, the DOE/NV may accumulate the residue(s), in excess of fifty-five (55) gallons from treatment by the Prototype Unit in this area for a period not to exceed one hundred and twenty (120) days. Requirements for this area are:

3.4.4.1 Treatment of Residue The Permittee shall fully characterize residue from the treatment of the waste munition in compliance with the provisions of the Land Disposal Restrictions (LDRs) of 40 CFR §268. The DOE/NV shall make a waste determination for any remaining portion of the munition and manage as appropriate. The characterization results and subsequent waste determination shall be a made a part of the Interim Status Report, required by Section 2.15 Compliance Schedule, of this Permit. The Permittee shall also retain on-site, until closure of the facility a copy (or original) of all notices, certifications, demonstrations (as non-hazardous), waste analysis data and any other documentation related to the management of all wastes (either for on-site, off-site treatment, storage or disposal) subject to the LDRs pursuant to 40 CFR §261.3(c)(2)(I).

3.4.4.2 <u>Management of Residue</u> The Permittee shall manage all residue from treatment by the Prototype Unit in accord with 40 CFR §262.34

Note: The time frame for onsite management of residuals may be increased or reduced by the NDEP upon review of the Interim Status Report. Storage in exceedence of this (or a new requirement by the NDEP) shall constitute a violation of this Permit and automatically revoke this Permit until reissued by the Administrator.

3.4.4.3 Recycling The Permittee shall comply with the requirements of 40 CFR 266 Subpart F-Recyclable Materials Utilized for Precious Metal Recovery, where and when applicable.

3.5 Maximum Waste Storage

The maximum amount of hazardous waste to be stored at the TaDD Facility shall be Two Hundred (200) Shillelagh Rockets total, inclusive of all extensions of this Permit. The Permittee shall submit a request and receive approval from the NDEP to accept and/or treat additional waste prior to any request for or acceptance of further waste munitions. Any exceedence of this shall constitute non-compliance and automatically revoke this Permit until reissued.

3.6 Special Requirements For Ignitable Or Reactive Waste

The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the Facility's property line and any additional requirements of the Missile Storage, Handling and Disassembly SOP.

3.7 Special Requirements For Incompatible Waste

The Permittee shall not store or treat waste other than the waste expressly identified in this Permit.

3.8 Management Of Waste

Nothing in this Permit shall be construed as having relieved the Permittee from the requirements of 40 CFR Subpart M - Military Munitions or 40 CFR or Subpart EE Hazardous Waste Munitions and Explosives Storage. Nor is there any relief from any other RCRA requirement of 40 CFR §§260 through 270 for the proper characterization and management of waste.

Other then the time frame specified in Section 3.4.4 Waste Accumulation Area, for accumulation of

waste residue, the Permittee is assumed to be aware of the requirements of the applicable parts of the 40 CFRs, NACs and NRSs. By acceptance of this Permit the Permittee explicitly acknowledges these requirements.

3.9 Personnel Qualifications

Personnel directly handling the munitions shall meet the applicable training requirements of Section H Personnel Training, while handling munitions during transport, storage, disassembly and treatment and disposal within the bounds of the facility. Should Section 3.1 apply the Permittee shall also comply with the requirements of training in Section H of the TaDD Complex Permit Application in addition to any other requirement.

<u>- SECTION 4 -</u> Conditions For Thermal Treatment Processes

4 Construction And Maintenance

The Permittee shall construct the Prototype Unit and the Testing Facility in accordance with the TaDD Complex drawings and specifications. At all times the Permittee shall maintain the facility according to the terms of this Permit and the prudent operation of a research hazardous waste treatment and storage facility.

4.1 Waste Treatment and Storage

- 4.1.1 The Permittee may deactivate (§268.40) by thermal treatment (as defined by 40 CFR §260.10) the following hazardous waste(s), subject to the terms of this Permit:
 - C D003 [Shillelagh Rockets]
- 4.1.2 The Permittee may store, subject to the terms of this Permit, the Treatment Residue, identified in Section 3, as defined by 40 CFR §261.3(c)(2)(I) for the purposes of further characterization for a term not to exceed ninety (90) days subsequent to treatment by the Prototype Unit. This does not relieve the Permittee from the requirements of the applicable sections of 40 CFR §264 Subpart B ~ General Facility Standards and Subpart I ~ Use and Management of Containers.

4.2 Maximum Waste To Be Treated During The Primary Phase And Secondary Phase

4.2.1 The Permittee shall not treat/test more than Fifty (50) Shillelagh Rockets for the Primary Phase of treatment/testing. Once this number of rockets has been treated/tested the Permittee shall <u>SUSPEND</u> <u>AND DISCONTINUE ALL OPERATION AND ASSOCIATED TREATMENT OF WASTE</u>. The Permittee shall then submit to the Administrator an Interim Status Report (as identified in Section 2.15 Compliance Schedule) for review and comment. Once review has been completed, the NDEP will determine whether to approve further treatment activities, modify, re-issue or revoke this Permit. The NDEP may establish and incorporate into this Permit further operating conditions listed in Section 4.5, based in part on information submitted in the Interim Status Report, and any other information deemed applicable by NDEP. Should the NDEP approve further treatment activities, the Permittee will receive a letter authorizing the resumption of activities. Until such time as the

Permittee receives said letter, all testing activity at the TaDD Facility will cease. Review, comment and DOE/NV response time will automatically extend the active life of this Permit by an equivalent amount (not to exceed one hundred and eighty [180] days).

- 4.2.2 Should the NDEP allow this Permit to continue, the Permittee is restricted to the testing of no more than an additional One Hundred and Fifty (150) Shillelagh Missiles subject to Section 3.5 and Section 2.15. This section [4.2.2] shall be effective only at such time as the Permittee has received the aforementioned letter.
- 4.2.3 The Permittee shall have Assistant Manager of Environmental Management (AMEM), or equivalent, of the Department of Energy, Nevada Operations sign and certify the Interim Status report in accordance with 40 CFR §270.11.

4.3 Stack Sampling And Monitoring Plan

- 4.3.1 The Permittee shall monitor the emissions as specified in the NDEP Class II Air Quality Operating Permit #AP9711-0814 and:
- 4.3.2 The Permittee shall monitor the following parameters when treating hazardous waste:
 - < Temperature:

In the Gas holder & at the exit point of the stack;

Maximum, minimum and time for return to ambient

- Pressure in the gas holder: Maximum, minimum and time for return to ambient
- Residence time of the combustion gas(es) in the gas holder
- < Sulphur Dioxides
- < Nitrogen Oxides
- < Particulates [Visible emission Method 22 {40 CFR 60}]
- < Carbon Monoxide
- < Lead

4.4 **Operating Conditions**

- 4.4.1 As specified in the Class II Air Quality Operating Permit #AP9711-0814
- 4.4.2 The Prototype Unit shall meet the following additional Operating Conditions:

4.4.2.1 At no time shall the Prototype Unit be operated unless treating the Hazardous Waste identified in this Permit (except for the Start up Phase of operation [Section E.1.c of the application])

- 4.4.2.2 At no time shall the Prototype Unit be operated unless all Interlocks are in place and verified as operational.
- 4.4.2.3 Combustion gas shall not be vented to the atmosphere prior to release to the filters unless so ordered by the Project/Facility Manager and during an emergency.
- 4.4.2.4 The emissions shall be monitored at a representative point at the interface of the missile holder and rocket motor. The Monitoring data shall be submitted and evaluated in conjunction with the Interim Status report.
- 4.4.2.5 The emissions during and residue (40 CFR §261.3) subsequent to deactivation and treatment shall be sampled a minimum of four (4) times during the Acceptance Phase of testing for semi-volatile organic compounds (SVOCs), Volatile organic compounds (VOCs) and lead (D008). Sampling shall occur as specified in Section C.1.b, at the Chemical Absorption Traps (CATs), Filters, and hopper, as considered representative of the processing train by the Permittee. The results shall be submitted and evaluated in conjunction with the Interim Status Report.
- 4.4.2.6 The emission system dust collector and secondary filter must be utilized when operating the Prototype Unit for the purpose of treating the hazardous waste identified in this Permit.
- 4.4.2.7 The Off-Gas treatment filtration system must be utilized when operating the Prototype Unit for the purpose of capturing emissions from treatment by the Prototype Unit.

4.5 Operating Conditions To Be Established after submission of the Interim Status Report

- C The Gas Holder temperature shall be between ___ and ___ during treatment.
- C The residence time of combustion by-products shall be between ___ and ___
- C The LEL in the Gas Holder shall be less than _____ prior to release to the filtration system
- C The pressure in the Gas Holder shall be less than ____ prior to release to the filtration system.
- C The maximum waste feed rate shall be .
- C The stack gas concentration(s) of the following constituents 1, 2, 3...etc. shall be less than ___ ppm.

- C The Secondary Ignition system shall be operated during treatment of reactive waste.
- C The Permittee shall control fugitive emissions from the Prototype Unit as specified in Air Permit #AP9711-0814
- C The Permittee must cease operation when the operating conditions exceed limits designated in this Permit.
- 4.5.1 In addition to the above, the Prototype Unit shall establish the following Operating Conditions after submission of the Interim Status Report:
- C The Permittee shall establish the procedure by which fugitive emissions will be controlled from the combustion zone/chamber by:
 - i. keeping the combustion zone totally sealed against fugitive emission or,
 - ii. maintaining a combustion zone pressure lower than atmospheric pressure or,
 - iii. an alternate means of control satisfying this requirement.
- The Permittee shall determine, using the appropriate EPA Method (or equivalent), the Destruction and Removal Efficiency (DRE) for all Hazardous Organic Constituents identified in Section 4.6 Test Plan and Reporting. If a method does not exist for a particular constituent, the SVOC and VOC concentrations shall be reported. In addition, if any organic constituents identified in Permit condition 4.4.2.5 are found to be exiting the stack, the Permittee shall determine 1) whether an alternate means of control is necessary and/or 2)How the DRE of the constituent compares with the Performance Standard of 40 CFR §264.343.
- C The DRE shall be determined by the formula specified in 40 CFR §264.343. The proposed control shall be submitted in conjunction with the Interim Status Report.

4.6 Test Plan And Reporting

< The Organic Constituents are:

Organic Constituents				
Name Common/Scientific	Chemical Formula	Wt. %	Vol. %	
Nitroglycerin	$C_3H_5N_3O_4$	~ 34.9	~ 23	
Toluenediamine/Toluene-2,4-Diamine	$C_7H_{10}N_2$	~ 0.50	~ 0.1	
Diethylpthalate	$C_{12}H_{10}N_2O_2$	~ 10.5	~ 7	

The Inorganic Constituents are:

Inorganic Constituents				
Name (Common)	Chemical Formula	Wt. %	Vol. %	
Lead Salicylate	??	~ 1.2	0.04	
Lead 2-Ethylhexoate	Pb(OCC ₆ H ₄ OH)*2H ₂ O	~ 1.2	0.04	

- Test Data Submissions. The Permittee shall submit an Interim Status Report to the Administrator upon completion of the Preliminary Activities portion of testing. This report will summarize the test results and discuss the feasibility or in-feasibility of the experimental activities. This will, in part, be based on the operating conditions specified in this Permit and or adopted by reference into this Permit. QA/QC results shall be submitted with this report. All submissions must be certified in accordance with 40 CFR §270.11. The Permittee shall make any data available to the NDEP upon written or oral request.
- C The Permittee shall report the information necessary as specified in 40 CFR §§ 270.24, 270.25 and 270.27 in the Interim Status Report.
- C The Permittee shall report the information specified in Sections 4.5 through 4.6 to the Administrator according to Section 2.15 Compliance Schedule.